

1990 ANNUAL REPORT OF THE BOARD OF TRUSTEES
OF THE FEDERAL SUPPLEMENTARY MEDICAL IN-
SURANCE TRUST FUND

COMMUNICATION

FROM

THE BOARD OF TRUSTEES, THE FEDERAL
SUPPLEMENTARY MEDICAL INSURANCE
TRUST FUND

TRANSMITTING

THE 1990 ANNUAL REPORT OF THE FEDERAL SUPPLEMENTARY
MEDICAL INSURANCE TRUST FUND, PURSUANT TO 42 U.S.C.
1841(b)(2)



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LETTER OF TRANSMITTAL

Board of Trustees of the
Federal Supplementary Medical Insurance Trust Fund
Washington, D.C., April 18, 1990

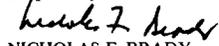
HONORABLE THOMAS S. FOLEY
Speaker of the House of Representatives
Washington, D.C.

HONORABLE DAN QUAYLE
President of the Senate
Washington, D.C.

GENTLEMEN:

We have the honor of transmitting to you the 1990 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund (the 25th such report), in compliance with the provisions of section 1841(b) of the Social Security Act.

Respectfully,


NICHOLAS F. BRADY,
Secretary of the Treasury, and
Managing Trustee of the Trust Fund


ELIZABETH DOLE,
Secretary of Labor, and Trustee


LOUIS W. SULLIVAN, M.D.,
Secretary of Health and
Human Services, and Trustee

PUBLIC TRUSTEE,
Vacant

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GAIL R. WILENSKY, Ph.D.,
Administrator of the Health Care
Financing Administration, and
Secretary, Board of Trustees

(III)

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THE 1990 ANNUAL REPORT OF THE BOARD, PURSUANT TO
SECTION 1841(b) OF THE SOCIAL SECURITY ACT
AS AMENDED

VII

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Federal Supplementary Medical Insurance Trust Fund
Washington, D.C., April 18, 1990

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EXECUTIVE SUMMARY

The supplementary medical insurance (SMI) program pays for physician services, outpatient hospital services, and other medical expenses for both aged 65 and over and for the long-term disabled. In calendar year (CY) 1989, 32.0 million persons were covered under SMI. General revenue contributions during 1989 amounted to \$30.9 billion, accounting for 69.6 percent of all SMI income. About 27.7 percent of all income resulted from the premiums paid by the enrollees including the income from the catastrophic coverage monthly premiums. Interest payments to the SMI fund accounted for the remaining 2.7 percent. Of the \$39.8 billion in SMI disbursements, \$38.3 billion was for benefit payments while the remaining was spent for administrative expenses. SMI administrative expenses were 3.7 percent of total disbursements.

The SMI program essentially is yearly renewable term insurance financed from premium income paid by the enrollees and from income contributed from general revenue. This means that the SMI program is financed on an accrual basis with a contingency margin, and, therefore, the SMI trust fund should always be somewhat greater than the claims that have been incurred by enrollees but not yet paid by the program. The trust fund holds all of the income not currently needed to pay benefits and related expenses. The assets of the fund may not be used for any other purpose; however, they may be invested in certain interest-bearing obligations of the U.S. Government.

Financing for the non-catastrophic portion of the SMI program is established annually on the basis of standard monthly premium rates (paid by or on behalf of all participants) and monthly actuarial rates determined

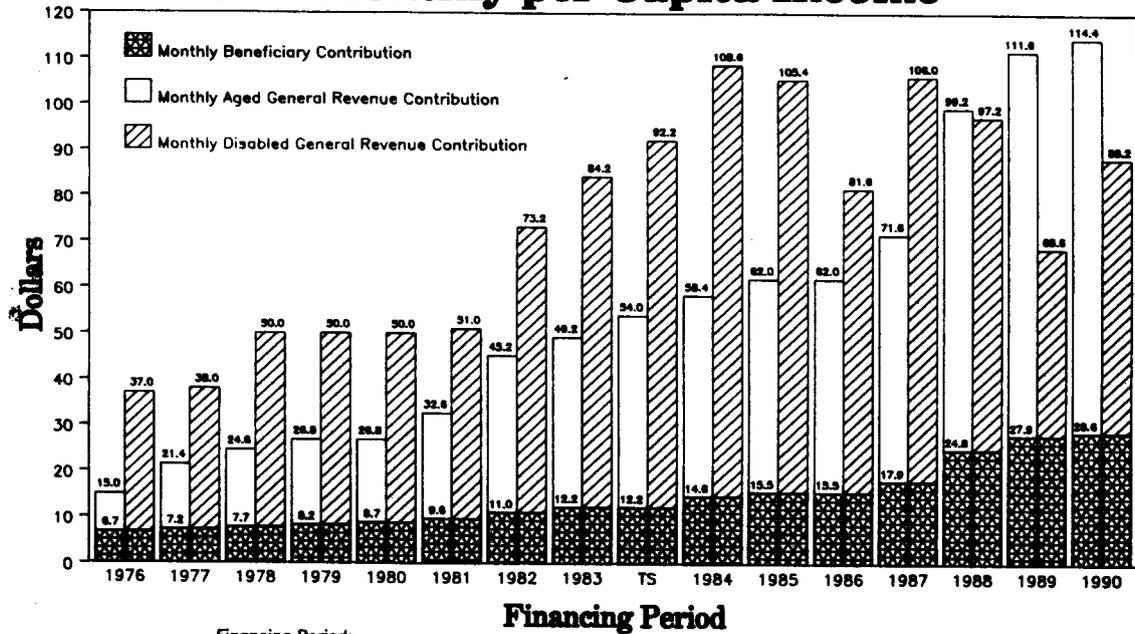
separately for aged and disabled beneficiaries on which general revenue contributions are based. Prior to the 6-month transition period (July 1, 1983 through December 31, 1983), these rates were applicable in the 12-month periods ending June 30. Beginning January 1, 1984, the annual basis was changed to calendar years. Monthly actuarial rates are equal to one-half the monthly amounts necessary to finance the SMI program. These rates determine the amount to be contributed from general revenues on behalf of each enrollee. Based on the formula in the law, the Government contribution effectively makes up the difference between twice the monthly actuarial rates and the standard monthly premium rate. Figure 1 presents these values for financing periods since 1976. This figure clearly indicates the extent to which general revenue financing is the major source of income for the program.

Financing for the catastrophic portion of the SMI program was established annually by the Medicare Catastrophic Coverage Act of 1988 on the basis of the catastrophic coverage monthly premium rates (paid by or on behalf of all participants) and the supplemental catastrophic coverage premium rates. The enactment of the Medicare Catastrophic Coverage Repeal Act of 1989 repealed the catastrophic coverage monthly premium rates effective January 1, 1990 and the supplemental catastrophic coverage premium rates retroactively to January 1, 1989.

Operations of the SMI Program

Historical and projected operations of the fund through 1992 are shown in Tables 5 and 6 in this report. As can be seen, income has exceeded disbursements for most of the historical years. The financing for CY 1990 was

Figure 1
SMI Monthly per Capita Income*



Financing Period:

For periods 1983 and earlier, the financing period is July 1 through June 30.

Transitional semester (TS), the financing period is July 1, 1983 through December 31, 1983.

for 1984 through 1990 the Financing Period is January 1 through December 31.

*The amounts shown do not include the catastrophic coverage monthly premium rate for 1989.

established to maintain aged assets and to decrease disabled assets while reducing the assets overall. As a result, in CY 1990, disbursements are projected to exceed income, and the trust fund balance is projected to decrease through CY 1990.

The financial status of the program depends on both the total net assets and liabilities. It is, therefore, necessary to examine the incurred experience of the program, since it is this experience that is used to determine the actuarial rates discussed above and which forms the basis of the concept of actuarial soundness as it relates to the SMI program.

Actuarial Soundness of the SMI Program

The concept of actuarial soundness, as it applies to the SMI program, is closely related to the concept as it applies to private group insurance. The SMI program is essentially yearly renewable term insurance financed from premium income paid by the enrollees, from income contributed from general revenue, and from interest payments on the trust fund assets.

In testing the actuarial soundness of the SMI program, it is not appropriate to look beyond the period for which the enrollee premium rates and level of general revenue financing have been established. The primary tests of actuarial soundness, then, are that: (1) assets and income for years for which financing has been established be sufficient to meet the projected benefits and associated administrative expenses incurred for that period and (2) assets be sufficient to cover projected liabilities that will have been incurred by the end of that time but will not have been paid yet. Even if these tests

of actuarial soundness are not met, the program can continue to operate if the trust fund remains at a level adequate to permit the payment of claims as presented. However, to protect against the possibility that cost increases under the program will be higher than assumed, assets should be sufficient to cover the impact of a moderate degree of variation between actual and projected costs.

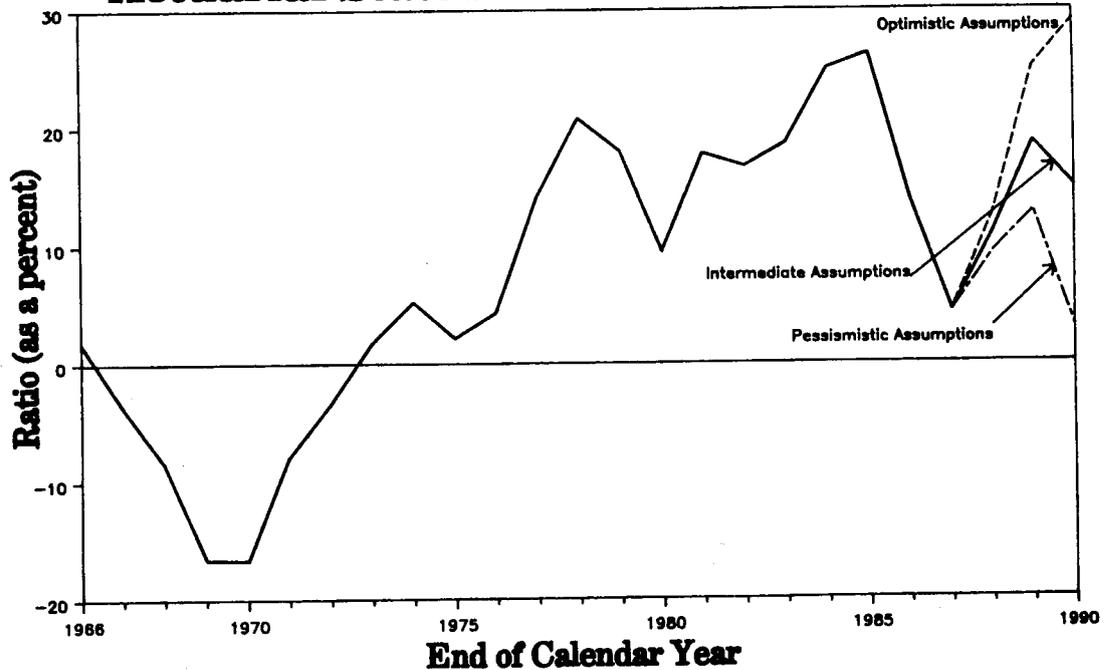
The primary tests for actuarial soundness and trust fund adequacy can be viewed by direct examination of absolute dollar levels. In providing an appropriate contingency or margin for variation, however, there must also be some relative measure. The relative measure or ratio used for this purpose is the ratio of the assets less liabilities to the following year's incurred expenditures. Figure 2 shows this ratio for historical years and for projected years under the intermediate assumptions (alternative B), as well as high (pessimistic) and low (optimistic) cost sensitivity scenarios.

Financing CY 1990 was established to maintain aged assets and to decrease disabled assets while reducing the overall relative level of the excess of assets over liabilities. In addition, the Omnibus Budget Reconciliation Act of 1989 was enacted on December 19, 1989 after the financing had been established for CY 1990. As a net result, the excess of assets over liabilities is expected to decrease by December 31, 1990.

Conclusion of the Board of Trustees

The financing established through December 1990 is sufficient to cover projected benefits and administrative costs through that time period. This

Figure 2
Actuarial Status of the SMI Trust Fund



Note: The actuarial status of the SMI trust fund is measured by the ratio of the end of year surplus or deficit to the following year incurred expenditures

financing is sufficient to maintain a level of trust fund assets which is adequate to cover the impact of a moderate degree of variation between actual costs and projected costs. The SMI program can thus be said to be actuarially sound.

Although the SMI program is financially sound, the Board notes with concern the rapid growth in the cost of the program. Growth rates have been so rapid that outlays of the program have nearly doubled in the last 5 years. For the same time period, the program grew 40 percent faster than the economy as a whole. This growth rate shows no sign of significantly abating despite recent efforts to control the cost of the program. The Board recommends that Congress continue to work to curtail the rapid growth in the SMI program.

1990 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF
THE FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND

THE BOARD OF TRUSTEES

The Federal Supplementary Medical Insurance Trust Fund, established on July 30, 1965, is held by the Board of Trustees under the authority of section 1841(b) of the Social Security Act, as amended. The Board currently has three members. They serve in an ex officio capacity. These members are the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health and Human Services. The Board also includes positions for two members of the public as Trustees. The last two Public Trustees served under recess appointments which expired when Congress adjourned on November 22, 1989.

By law, the Secretary of the Treasury is designated as the Managing Trustee, and the Administrator of the Health Care Financing Administration is designated as Secretary of the Board. The Board of Trustees reports to the Congress each year on the operation and status of the trust fund, in compliance with section 1841(b)(2) of the Social Security Act. This annual report, for 1990, is the 25th such report.

SOCIAL SECURITY AMENDMENTS SINCE THE 1989 REPORT

Since the 1989 Annual Report was transmitted to Congress, two laws affecting the SMI program (also known as Medicare Part B) have been enacted. The more important legislative changes, from an actuarial standpoint, are described below.

The Medicare Catastrophic Coverage Repeal Act of 1989 (Public Law 101-234) was enacted on December 13, 1989; this legislation repealed the major Medicare coverage provisions which had been enacted under the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360) including the Part B benefits which were to be effective January 1, 1990. The provision for a supplemental catastrophic coverage premium was repealed retroactive to January 1, 1989. The provision for a catastrophic coverage monthly premium was repealed effective January 1, 1990. This monthly premium of \$4.00 for the majority of beneficiaries, which was collected during 1989, will remain in the SMI trust fund.

The Omnibus Budget Reconciliation Act of 1989 (OBRA 89, Public Law 101-239) was enacted December 19, 1989, and contained the following changes:

- (1) Payments were reduced by 2.092 percent from October 17 through the end of the fiscal year as a result of a Presidential sequester. OBRA 89 limited the time frame for this decrease for most Part B services to March 31, 1990. From April 1 through September 30, payments are reduced by 1.42 percent. For payments to Health Maintenance Organizations (HMOs) and Group Practice Prepayment

Plans (GPPPs), OBRA 89 limited the time frame for this decrease to December 31, 1989 with no reduction for the remainder of the fiscal year.

- (2) Beginning with 1992, payments to physicians are to be made under a fee schedule based on a resource-based relative value scale. This fee schedule will be phased-in over the years 1992 - 1996. New limits on actual charges will be phased-in beginning in 1991 so that the limit will equal 115 percent of the non-participating physician fee schedule amount by 1993.

By January 1, 1992 and yearly thereafter, the Secretary of Health and Human Services (HHS) is required to provide for a national fee schedule for payment of physicians services in all localities. Payment under the fee schedule is equal to the product of the conversion factor for the year for each category of physician services, a relative value for each service, and a geographic adjustment factor.

Physician services are divided into 3 components: work, practice expense, and malpractice. The work component is that portion of the resources used in furnishing the service that reflects physician time and intensity. It includes activities before and after patient contact. For surgical procedures, the term includes both pre- and post-operative services. The practice expense component includes that portion of the resources used in furnishing the service that reflects the general categories of expenses (such as office rent and

wages of personnel). The malpractice component refers to the portion of the resources associated with malpractice expenses. The Secretary of HHS will develop a methodology for combining the work, practice expense and malpractice relative value units for each service to produce a single relative value for that service in each locality.

- (3) Certain procedures which are overpriced by at least 10 percent have had a reduction in payment. The amount of the reduction equals one-third of the difference between the 1989 prevailing charge amount and the locally-adjusted reduced prevailing amount up to a maximum of 15 percent.
- (4) There is a reduction in payments to radiologists for 1990. The 1989 rates continue to be effective through March 31, 1990; however, after that time, the fee schedules are reduced by 4 percent. Nuclear medicine and portable X-ray services are exempted from the freeze and reduction. In addition, after April 1, there is an increase for nuclear-medicine payments for 1990.
- (5) Updates for physician allowed charges and the maximum allowable actual charges are delayed from January 1, 1990 to April 1, 1990. After that time, primary care services will receive the Medicare Economic Index (MEI) update. The prevailing charge increase will be 0 percent for radiology services, anesthesia services, and overpriced procedures and 2 percent for all other services.

- (6) Payments for surgery, radiology, and diagnostic physician services are limited to the prevailing charge or fee schedule for that specialty of physicians who nationally furnish the service most frequently.
- (7) Effective January 1, 1990, for clinical diagnostic laboratory tests, there is a ceiling on fee schedule payments of 93 percent of the national median for a particular test. In addition, it eliminates the requirement for a nationwide fee schedule.
- (8) The legislation delays the price update for most durable medical equipment and supplies until January 1, 1991.
- (9) Prior to the passage of OBRA 89, payment for clinical psychologists services was made only if the services were performed on site at a community health center. If they were performed elsewhere, payment could be made only if they were performed off site because of the patient's inability to travel to the community center. Effective July 1, 1990, this restriction on payment for clinical psychologists is eliminated. Clinical psychologists will be reimbursed for the same services that are already covered when performed by a physician.

Effective July 1, 1990, clinical social worker services will be covered, with reimbursement set at 80 percent of the lesser of actual charges or 75 percent of the amount which would be paid to a psychologist.

For expenses incurred in 1990 and thereafter, the dollar limitation of \$1,375 per year for outpatient mental health services is eliminated.

- (10) The legislation maintains the current end-stage renal disease (ESRD) composite rate until October 1, 1990. In addition, the amount of payment based on any reimbursement mechanism other than the single composite weighted formula will not exceed the median payment that would have been made under the formula for hospital-based facilities.

- (11) The Part B premium amount is continued to be set at 25 percent of program costs for the aged in CY 1990.

Detailed information regarding these changes and other less significant changes can be found in documents prepared by and for the Congress.

NATURE OF THE TRUST FUND

The Federal Supplementary Medical Insurance Trust Fund was established on July 30, 1965, as a separate account in the United States Treasury. All the financial operations of the SMI program are handled through this fund.

The major sources of receipts of the trust fund are: (1) contributions of the Federal Government that are authorized to be appropriated and transferred from the general fund of the Treasury and (2) premiums paid by eligible persons who are voluntarily enrolled in the program. The premiums paid by eligible persons in 1989 include both those specified by the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360) and those needed to finance the non-catastrophic benefits. With the enactment of the Medicare Catastrophic Coverage Repeal Act of 1989 (Public Law 101-234), there will be no catastrophic premiums after 1989. Therefore the discussion in the remainder of this section will deal only with non-catastrophic coverage. Eligible persons aged 65 and over have been able to enroll in the program since its inception in July 1966. Since July 1973, disabled persons under age 65, who have met certain eligibility requirements, have also been able to enroll in the program.

The premiums paid by enrollees are based on the standard monthly premium rate, which is the same for enrollees aged 65 and over and for disabled enrollees under age 65. Premiums paid for Fiscal Years (FY) 1967 through 1973 were matched by an equal amount of Government contributions. Beginning July 1973, the amount of Government contributions corresponding to premiums paid by each of the two groups of enrollees is determined by applying a ratio (known as the matching rate), prescribed in the law for each group, to the amount of premiums received from that group of enrollees. The

ratio is equal to: (1) twice the amount of the monthly actuarial rate applicable to the particular group of enrollees, minus the amount of the standard monthly premium rate, divided by (2) the amount of the standard monthly premium rate.

Standard monthly premium rates and actuarial rates are promulgated each year by the Secretary of HHS. The standard monthly premium rates in effect from July 1966 through June 1983, the rate for July 1983 through December 1983, and the rates for CY 1984 through 1990 are shown in Table 1. Actuarial rates and the corresponding matching rates in effect from July 1973 through June 1983, the rates applicable for July 1983 through December 1983, and the rates for CY 1984 through 1990 are also shown. For a detailed discussion of the determination of the actuarial and premium rates, see Appendix B.

Another source from which receipts of the trust fund are derived is interest received on investments held by the fund. The investment procedures of the fund are described later in this section.

Section 201(i) of the Social Security Act authorizes the Managing Trustee to accept and deposit in the trust fund unconditional money gifts or bequests made for the benefit of the fund or for any activity financed through the fund.

Expenditures for benefit payments and administrative expenses under the program are paid out of the trust fund. All expenses incurred by the Department of HHS and by the Department of the Treasury in carrying out the SMI provisions of Title XVIII of the Social Security Act are charged to the trust fund. The Secretary of HHS certifies benefit payments to the Managing Trustee, who makes the payments from the trust fund in accordance therewith.

Table 1.--STANDARD MONTHLY PREMIUM RATES, ACTUARIAL RATES, AND MATCHING RATES

	Standard monthly premium rate	Monthly actuarial rate		Matching rate	
		Enrollees aged 65 and over	Disabled enrollees under age 65	Enrollees aged 65 and over	Disabled enrollees under age 65
July 1966 - March 1968	\$ 3.00	---	---	---	---
April 1968 - June 1970	4.00	---	---	---	---
12-month period ending June 30 of --					
1971	5.30	---	---	---	---
1972	5.60	---	---	---	---
1973	5.80	---	---	---	---
1974 ^{1/}	6.30	\$ 6.30	\$14.50	1.0000	3.6032
1975	6.70	6.70	18.00	1.0000	4.3731
1976	6.70	7.50	18.50	1.2388	4.5224
1977	7.20	10.70	19.00	1.9722	4.2778
1978	7.70	12.30	25.00	2.1948	5.4935
1979	8.20	13.40	25.00	2.2683	5.0976
1980	8.70	13.40	25.00	2.0805	4.7471
1981	9.60	16.30	25.50	2.3958	4.3125
1982	11.00	22.60	36.60	3.1091	5.6545
1983	12.20	24.60	42.10	3.0328	5.9016
July 1983 - December 1983	12.20	27.00	46.10	3.4262	6.5574
Calendar year					
1984	\$14.60	\$29.20	\$54.30	3.0000	6.4384
1985	15.50	31.00	52.70	3.0000	5.8000
1986	15.50	31.00	40.80	3.0000	4.2645
1987	17.90	35.80	53.00	3.0000	4.9218
1988	24.80	49.60	48.60	3.0000	2.9194
1989	31.90 ^{2/}	55.80	34.30	3.0000 ^{3/}	1.4588 ^{3/}
1990	28.60	57.20	44.10	3.0000	2.0839

^{1/} In accordance with limitations on the costs of health care imposed under Phase III of the Economic Stabilization program, the standard premium rate for July and August 1973 was set at \$5.80 and \$6.10, respectively. Effective September 1973, the rate increased to \$6.30.

^{2/} This is the premium paid by most groups. This rate includes the \$4.00 catastrophic coverage monthly premium which was paid by most enrollees.

^{3/} The matching ratios for CY 1989 apply to the non-catastrophic portion of the standard monthly premium rate.

The Social Security Amendments of 1967 and 1972 authorize the Secretary of HHS to develop and conduct a broad range of experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services, under the hospital insurance (HI) and SMI programs. A sizeable portion of such costs of such experiments and demonstration projects are paid out of the HI and SMI trust funds, with the remainder funded through general revenues.

Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the SMI program. Both the capital costs of construction financed directly from the trust fund and the rental and lease, or purchase contract costs of acquiring facilities are included in trust fund expenditures. In 1972-75, construction of several large facilities was authorized under purchase contract authority, wherein initial capital costs were borne by the private sector. Under this method of facilities acquisition, trust fund expenditures for use and ultimate Government ownership of a facility are made over periods of from 10 to 30 years. Whatever the manner of acquisition, the net worth of facilities and other fixed capital assets is not carried in the statement of the assets of the trust fund presented in this report. This is because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and, therefore, is not viewed as being a consideration in assessing the actuarial status of the funds.

That portion of the trust fund which, in the judgment of the Managing Trustee, is not required to meet current expenditures for benefits and administration is invested in interest-bearing obligations of the U.S. Government (including special public-debt obligations described below), in obligations guaranteed as to both principal and interest by the United States, or in certain federally sponsored agency obligations that are designated in the laws authorizing their issuance as lawful investments for fiduciary and trust funds under the control and authority of the United States or any officer of the United States. Obligations of these types may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that such special public-debt obligations shall bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month next preceding the date of such issue) on all marketable interest-bearing obligations of the United States forming a part of the public debt which are not due or callable until after the expiration of 4 years from the end of such calendar month.

SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1989

A statement of the income and disbursements of the Federal Supplementary Medical Insurance Trust Fund in FY 1989 and of the assets of the fund at the beginning and end of the fiscal year is presented in Table 2.

The total assets of the trust fund amounted to \$6,447 million on September 30, 1988. During FY 1989, total receipts amounted to \$43,282 million, and total disbursements were \$38,317 million. Total assets thus increased \$4,965 million during the year to a total of \$11,412 million on September 30, 1989.

Of the total receipts, \$9,487 million represented premium payments by (or on behalf of) enrollees aged 65 and over, \$945 million represented premium payments by (or on behalf of) disabled enrollees under age 65, and \$1,117 million represented catastrophic coverage monthly premium payments. Total premium payments amounted to \$11,548 million, an increase of 31.9 percent over the amount of \$8,756 million for the preceding year. This increase in premiums from enrollees resulted primarily from: (1) the increase from \$24.80 to \$31.90 per month in the standard premium rate that became effective on January 1, 1989 and (2) the growth of the number of persons enrolled in the SMI program.

Contributions received from the general fund of the treasury amounted to \$30,712 million, which accounted for 71.0 percent of total receipts. This amount consisted of \$29,009 million representing contributions relating to premiums paid by enrollees aged 65 and over, and \$1,703 million representing contributions relating to the premiums paid by disabled enrollees under age 65. The remaining \$1,022 million of receipts consisted almost entirely of interest on the investments of the trust fund.

Table 2.-- STATEMENT OF OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE
TRUST FUND DURING FISCAL YEAR 1989
(In thousands)

Total assets of the trust fund, beginning of period.....		<u>\$ 6,447,411</u>
Receipts:		
Premiums from enrollees:		
Enrollees aged 65 and over.....	\$ 9,486,519	
Disabled enrollees under age 65.....	944,702	
Catastrophic coverage monthly premiums.....	<u>1,116,575</u>	
Total premiums.....		11,547,796
Transfers from general fund of the Treasury:		
Government contributions:		
Supplementary premiums of enrollees aged 65 and over.....	29,009,382	
Supplementary premiums of disabled enrollees under age 65....	<u>1,702,618</u>	
Total Government contributions.....		30,712,000
Other.....		0
Interest:		
Interest on investments.....	1,032,631	
Interest on amounts of interfund transfers *.....	<u>-10,870</u>	
Total interest.....		<u>1,021,761</u>
Total receipts.....		43,281,557
Disbursements:		
Benefit payments.....		36,866,508
Administrative expenses:		
Treasury administrative expenses.....	2,454	
Salaries and expenses - SSA.....	221,480	
Salaries and expenses - HCFA.....	1,202,830	
Salaries and expenses Office of Secretary.....	11,457	
Construction.....	6,147	
Public Health Service.....	2,351	
Pay Assessment Commission.....	543	
Office of Personnel Management expenses.....	86	
Physicians Payment Review.....	<u>3,022</u>	
Total administrative expenses.....		<u>1,450,370</u>
Total disbursements.....		<u>38,316,878</u>
Net addition to the trust fund.....		<u>4,964,679</u>
Total assets of the trust fund, end of period.....		<u>11,412,088</u>

* A positive figure represents a transfer of interest to the SMI trust fund from the other trust funds.
A negative figure represents a transfer of interest from the SMI trust fund to the other trust funds.

NOTE: Totals do not necessarily equal the sum of rounded components.

Of the \$38,317 million in total disbursements, \$36,867 million represented: (1) benefits paid directly from the trust fund for health services covered under Title XVIII of the Social Security Act and (2) costs of experiments and demonstration projects in providing health care services.

The remaining \$1,450 million of disbursements was for administrative expenses. Administrative expenses are allocated and charged directly to each of the four trust funds--old age and survivors insurance, disability insurance, HI, and SMI--on the basis of provisional estimates. Similarly, the expenses of administering other programs of the Health Care Financing Administration are also allocated and charged directly to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, the allocations of administrative expenses and costs of construction for prior periods are adjusted by interfund transfers. This adjustment includes transfers between the HI and SMI trust funds and the program management general fund account, with appropriate interest allowances.

In Table 3, the experience with respect to actual amounts of enrollee premiums, Government contributions, and benefit payments in FY 1989 is compared with the estimates for FY 1989 which appeared in the 1988 and 1989 annual reports.

Table 4 shows a comparison of the total assets of the fund and their distribution at the end of FY 1988 and at the end of FY 1989. The assets of the trust fund at the end of FY 1988 totaled \$6,447 million, consisting of \$6,326 million in the form of obligations of the U.S. Government, and an undisbursed

**Table 3.--COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF
THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND,
FISCAL YEAR 1989
(Dollar amounts in millions)**

<u>Item</u>	Comparison of actual experience with estimates for FY 1989 published in --				
	1989 report			1988 report	
	<u>Actual amount</u>	<u>Estimated amount</u>	<u>Actual as percentage of estimate</u>	<u>Estimated amount</u>	<u>Actual as percentage of estimate</u>
Premiums from enrollees	\$11,548 <u>1/</u>	\$11,614	99	\$10,341 <u>2/</u>	112
Government contributions	30,712	30,712	100	31,137	99
Benefit payments	36,867	37,402	99	38,356	96

- 1/ The FY 1989 premium contribution from enrollees included a catastrophic coverage monthly premium of \$4.00 (for most individuals), which was mandated by the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360). The one-year contribution due to that premium was \$1,117 million.
- 2/ The 1988 estimate for fiscal year 1989 enrollee premium contributions was completed prior to enactment of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360). If the resulting receipt of \$1,117 million that was collected based on the \$4.00 catastrophic coverage monthly premium had been known at the time, then the 1988 estimate for fiscal year 1989 enrollee premium contribution would have been \$11,458 million--within one percent of the actual amount.

Table 4.-- ASSETS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND
AT THE END OF FISCAL YEARS 1988 AND 1989 *

	September 30, 1988	September 30, 1989
Investments in public-debt obligations sold only to this fund (special issues):		
Certificates of indebtedness:.....	\$ 8,558,000.00	\$ 345,777,000.00
Bonds:		
8 3/8-percent, 2001.....	444,270,000.00	444,270,000.00
8 3/4-percent, 1990-2004.....	--	4,743,765,000.00
9 1/4-percent, 1991-93.....	1,136,139,000.00	1,128,519,000.00
9 3/4-percent, 1995.....	115,003,000.00	115,003,000.00
10 3/8-percent, 1994-2000.....	1,661,292,000.00	1,661,292,000.00
10 3/4-percent, 1994-98.....	809,231,000.00	809,231,000.00
13 1/4-percent, 1994-97.....	1,033,983,000.00	1,033,983,000.00
13 3/4-percent, 1994-99.....	<u>1,117,677,000.00</u>	<u>1,117,677,000.00</u>
Total investments in public-debt obligations.....	6,326,153,000.00	11,397,517,000.00
Undisbursed balance.....	121,258,054.76	14,571,382.00
Total assets.....	6,447,411,054.76	11,412,088,382.00

* The assets are carried at par value, which is the same as book value.

balance of \$121 million. The assets of the trust fund at the end of FY 1989 totaled \$11,412 million, consisting of \$11,398 million in the form of obligations of the U.S. Government and an undisbursed balance of \$15 million. A comparison of assets of the trust fund with liabilities for incurred but unpaid benefits (and related administrative expenses) is shown in a later section.

The net increase in the par value of the investments held by the fund during FY 1989 amounted to \$5,071 million. New securities at a total par value of \$49,160 million were acquired during the fiscal year through the investment of receipts and reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the year was \$44,427 million. Included in these amounts is \$43,618 million in certificates of indebtedness that were acquired, and \$43,619 million in certificates of indebtedness that were redeemed, within the fiscal year.

The effective annual rate of interest earned by the assets of the SMI trust fund for the 12 months ending on June 30, 1989 was 10.2 percent. This period is used because interest on special issues is paid semiannually on June 30 and December 31. The interest rate on special issues purchased by the trust fund in June 1989 was 8 3/4 percent, payable semiannually.

EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND
DURING THE PERIOD OCTOBER 1, 1989 AND DECEMBER 31, 1992

Financing for the SMI program is established annually on the basis of standard monthly premium rates (paid by or on behalf of the enrollees) and actuarial rates on which general revenue contributions are based. Beginning January 1, 1984, the annual basis has been the calendar year. For 1989, only, the financing was established also on the basis of the catastrophic coverage monthly premium rate. With the enactment of the Medicare Catastrophic Coverage Repeal Act of 1989 (Public Law 101-234), the financing for 1990 and beyond will no longer be established on the basis of catastrophic coverage premium rates.

Although standard monthly premium rates and actuarial rates have been set only for periods through December 31, 1990, projections are presented through December 31, 1992 to conform with the requirements of Section 1841(b) of the Social Security Act. It has been assumed in this report that financing after that time will be established in accordance with the provisions described in the "Nature of the Trust Fund" section.

The projections shown in the following tables are based on two sets of economic assumptions labeled alternative A and alternative B. These alternatives reflect two different levels of expectation of future performance of the economy. The economic and demographic assumptions underlying the alternative projections are described in detail in the 1990 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Appendix A presents an explanation of the effects of alternative A and alternative B on the projections in this report.

For the projection period shown in this report, the variation in economic performance between alternative A and alternative B does not significantly affect the operations of the SMI program.

The January 1, 1990 update of the allowable fee limits for physician services was delayed until April 1, 1990 by Public Law 101-239. Under both sets of projections, it is assumed that the April 1, 1990 increase will be 2.5 percent. Alternative A has the January 1, 1991 update as 3.6 percent and the alternative B as 3.7 percent. The costs per enrollee for institutional and other services under the SMI program are projected to increase an average of 15.5 percent for CY 1990 and 15.6 percent for CY 1991. These increases represent price increases and increases due to other factors.

Table 5 shows the projected operations of the trust fund on a fiscal-year basis through FY 1992. Table 6 shows the corresponding development on a calendar-year basis. The level of the trust fund increased in FY 1989 and CY 1989 for three reasons. First, the actuarial rates for this period were set to allow an increase in the assets. Second, actual expenditures were lower than the estimate at the time of promulgation, and the assets increased more than expected. Third, the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360) created the Medicare Catastrophic Coverage Account as of January 1, 1989. For CY 1989 the SMI-related transactions of this account were primarily income transactions since SMI catastrophic benefits were not effective until January 1, 1990.

The actuarial rates for CY 1990 were promulgated with specific margins to maintain aged assets and to continue to reduce disabled assets. Based on

Table 5.--ESTIMATED PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS)
FISCAL YEARS 1990-1992 AND ACTUAL DATA FOR 1967-1989
(In millions)

Fiscal year 1/	Income				Disbursements			Balance in fund at end of year 4/
	Premiums from enrollees	Government contributions 2/	Interest and other income 3/	Total income	Benefit payments	Administrative expenses	Total disbursements	
Historical:								
1967	\$ 647	\$ 623	\$ 15	\$ 1,285	\$ 664	\$ 135 5/	\$ 799	\$ 486
1968	698	634	21	1,353	1,390	142	1,532	307
1969	903	984	24	1,911	1,645	195	1,840	378
1971	936	920	12	1,876	1,979	217	2,196	57
1972	1,223	1,245	18	2,516	2,035	248	2,283	290
1973	1,427	1,430	29	2,734	2,255	289	2,544	481
1974	1,704	2,029	76	2,902	2,391	246	2,637	746
1975	1,887	2,330	105	3,809	2,874	409	3,283	1,272
1976	1,951	2,939	104	4,322	3,765	405	4,170	1,424
T.Q.	539	878	4	1,421	4,672	528	5,200	1,219
1977	2,193	5,053	137	7,383	1,769	132	1,401	1,239
1978	2,431	6,386	228	9,045	5,867	475	6,342	2,279
1979	2,635	6,841	363	9,839	6,852	504	7,356	3,968
1980	3,320	6,932	415	10,275	10,144	593	10,737	4,994
1981	3,320	13,323	372	12,439	12,345	983	13,228	4,532
1982	4,227	14,238	473	17,627	14,806	754	15,560	3,743
1983	4,907	16,811	682	19,147	17,487	824	18,311	5,810
1984	5,524	17,898	1,155	22,525	19,473	899	20,372	8,799
1985	5,699	18,076	1,228	24,577	21,808	922	22,730	10,646
1987	6,480	20,299	1,018	27,797	25,169	1,049	26,218	9,432
1988	8,756	25,418	828	35,002	31,682	1,265	32,947	6,392
1989	11,548 6/	30,712	1,022 6/	43,282 6/	36,867	1,450 6/	38,317 6/	6,447
Projected:								
Alternative A:								
1990	11,380 6/	32,879	1,275 6/	45,534 6/	42,502	1,479 6/	43,981 6/	12,965 6/
1991	11,617	35,477	1,267	48,361	47,226	1,522	48,748	12,578
1992	12,250	41,120	1,152	54,522	54,170	1,607	55,777	11,323
Alternative B:								
1990	11,380 6/	32,879	1,275 6/	45,534 6/	42,502	1,479 6/	43,981 6/	12,965 6/
1991	11,617	35,483	1,267	48,367	47,236	1,519	48,755	12,577
1992	12,279	41,152	1,152	54,583	54,229	1,601	55,830	11,330

1/ For 1967 through 1976, fiscal years cover the interval from July 1 through June 30; the three-month interval from July 1, 1976, through September 30, 1976, is labeled "T.Q.", the transition quarter; FY 1977-92 cover the interval from October 1 through September 30.

2/ The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.

3/ Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and other miscellaneous income.

4/ The financial status of the program depends on both the total net assets and the liabilities of the program (See Table 9).

5/ Administrative expenses shown include those paid in FY 1966 and 1967.

6/ Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

Table 6.--ESTIMATED PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS)
 CALENDAR YEARS 1990-1992 AND ACTUAL DATA FOR 1967-1989
 (In millions)

Calendar year	Income				Disbursements		Total disbursements	Balance in fund at end of year ^{3/}
	Premiums from enrollees	Government contributions ^{1/}	Interest and other income ^{2/}	Total income	Benefit payments	Administrative expenses		
Historical:								
1966	\$ 322	\$ 0	\$ 2	\$ 324	\$ 128	\$ 75	\$ 203	\$ 122
1967	640	933	24	1,597	1,197	110	1,307	412
1968	832	858	21	1,711	1,518	184	1,702	421
1969	914	907	18	1,839	1,865	196	2,061	199
1970	1,096	1,093	12	2,201	1,975	237	2,212	188
1971	1,302	1,313	24	2,639	2,117	280	2,397	450
1972	1,382	1,389	37	2,808	2,325	289	2,614	643
1973	1,550	1,705	57	3,312	2,526	318	2,844	1,111
1974	1,804	2,225	95	4,124	3,318	462	4,735	1,444
1975	1,918	2,648	107	4,673	4,273	542	5,622	1,799
1976	2,060	3,810	107	5,977	5,080	467	6,505	3,099
1977	2,247	5,386	172	7,805	6,038	503	7,755	4,400
1978	2,470	6,287	299	9,056	7,252	557	9,265	4,902
1979	2,719	6,645	404	9,768	8,708	610	11,245	4,530
1980	3,011	7,455	404	10,874	10,635	610	14,028	5,877
1981	3,722 ^{4/}	11,291 ^{4/}	361	15,374	13,113	915	16,227	6,230
1982	3,697 ^{4/}	12,284 ^{4/}	599	16,580	15,455	772	18,984	7,070
1983	4,236	14,861	727	19,824	18,106	878	20,552	9,698
1984	5,187	17,054	959	23,180	19,661	933	23,880	10,924
1985	5,613	18,250	1,243	25,106	22,947	1,060	27,299	8,291
1986	5,722	17,802	1,141	24,665	26,239	920	31,740	8,394
1987	7,409 ^{5/}	23,560 ^{5/}	875	31,844	30,820	1,260	35,230	8,990
1988	8,761 ^{5/}	26,203 ^{5/}	861	35,825	33,970	1,260	39,783 ^{6/}	13,541 ^{6/}
1989	12,263 ^{6/}	30,852	1,219 ^{6/}	44,334 ^{6/}	38,294	1,489 ^{6/}		
Projected:								
Alternative A:								
1990	11,125	32,455	1,285	44,865	43,643	1,460	45,103	13,303
1991	11,781	36,485	1,216	49,482	48,938	1,543	50,481	12,304
1992	12,406	42,664	1,076	56,146	55,862	1,628	57,490	10,960
Alternative B:								
1990	11,125	32,455	1,285	44,865	43,643	1,460	45,103	13,303
1991	11,781	36,492	1,216	49,489	48,956	1,539	50,495	12,297
1992	12,445	42,705	1,076	56,226	55,940	1,622	57,562	10,961

- ^{1/} The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.
- ^{2/} Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and other miscellaneous income.
- ^{3/} The financial status of the program depends on both the total net assets and the liabilities of the program. (See Table 9).
- ^{4/} Section 708 of Title VII of the Social Security Act modified the provisions for the delivery of Social Security benefit checks when the regularly designated delivery day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January, 1982 occurred on December 31, 1981. Consequently, the SMI premiums withheld from the checks (\$264 million) and the general revenue matching contributions (\$683 million) were added to the SMI trust fund on December 31, 1981. These amounts are excluded from the premium income and general revenue income for CY 1982.
- ^{5/} Delivery of benefit checks normally due January, 1988 occurred on December 31, 1987. Consequently, the SMI premiums withheld from the checks (\$692 million) and the general revenue matching contributions (\$2,178 million) were added to the SMI trust fund on December 31, 1987. These amounts are excluded from the premium income and general revenue income for CY 1988. (Refer to footnote 4).
- ^{6/} Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

these actuarial rates, the repeal of catastrophic coverage, and the above economic assumptions, the fund is projected to decrease to \$13.3 billion under both alternatives by the end of CY 1990 and then decrease again to \$12.3 billion by the end of CY 1991.

Table 7 shows the calendar year average increase in aggregate and per capita benefit payments through CY 1992. To reflect the size of the program relative to the economy as a whole, Table 7 also shows SMI benefit expenditures as a percent of Gross National Product (GNP). During CY 1989, the program grew 12.7 percent on an aggregate basis, grew 11.1 percent on a per capita basis, and increased from .70 to .73 percent of GNP.

Table 7.-- GROWTH IN TOTAL CASH BENEFITS UNDER THE SUPPLEMENTARY
MEDICAL INSURANCE PROGRAM THROUGH DECEMBER 31, 1992

Calendar year	Aggregate benefits (millions)	Percent change	Per capita benefits	Percent change	SMI benefits as a percent of GNP
Historical:					
1967	\$ 1,197		\$ 66.97		0.15
1968	1,518	26.8	82.27	22.8	0.17
1969	1,865	22.9	97.86	19.0	0.19
1970	1,975	5.9	101.30	3.5	0.19
1971	2,117	7.2	106.68	5.3	0.19
1972	2,325	9.8	114.91	7.7	0.19
1973	2,526	8.6	122.02	6.2	0.19
1974	3,318	31.4	144.47	18.4	0.23
1975	4,273	28.8	179.96	24.6	0.27
1976	5,080	18.9	207.39	15.2	0.29
1977	6,038	18.9	239.27	15.4	0.30
1978	7,252	20.1	279.58	16.8	0.32
1979	8,708	20.1	326.86	16.9	0.35
1980	10,635	22.1	389.87	19.3	0.39
1981	13,113	23.3	471.15	20.8	0.43
1982	15,455	17.9	545.55	15.8	0.49
1983	18,106	17.2	627.79	15.1	0.53
1984	19,661	8.6	670.77	6.8	0.52
1985	22,947	16.7	768.25	14.5	0.57
1986	26,239	14.3	861.37	12.1	0.62
1987	30,820	17.5	992.69	15.2	0.68
1988	33,970	10.2	1,078.41	8.6	0.70
1989	38,294	12.7	1,197.96	11.1	0.73
Projected:					
Alternative A:					
1990	43,643	14.0	1,346.38	12.4	0.79
1991	48,938	12.1	1,490.42	10.7	0.82
1992	55,862	14.1	1,680.52	12.8	0.88
Alternative B:					
1990	43,643	14.0	1,346.38	12.4	0.79
1991	48,956	12.2	1,490.97	10.7	0.83
1992	55,940	14.3	1,682.86	12.9	0.89

ACTUARIAL STATUS OF THE TRUST FUND

1. ACTUARIAL SOUNDNESS OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

The concept of actuarial soundness, as it applies to the SMI program, is closely related to the concept as it applies to private group insurance. The SMI program essentially is yearly renewable term insurance financed from premium income paid by the enrollees and from income contributed from general revenue. Consequently, the income to the program during a 12-month period for which financing is being established should be sufficient to maintain assets at a level to pay for services (including associated administrative costs) expected to be rendered during that period, even though payment for some of these services will not be made until after the close of the period. The portion of income required to cover those benefits not paid until after the close of the year should be added to the trust fund until needed. Thus, the assets in the trust fund at any time should be no less than the costs of the benefits and administration incurred but not yet paid.

The law requires the Secretary of HHS to establish income on the basis of incurred costs (including associated administrative costs) for the 12-month period for which financing is being established. Financing on an incurred basis means that income should be sufficient to cover the cost of services rendered during the period. However, since the income per enrollee (premium rate plus Government contribution) is established prospectively, it is subject to projection error. Additionally, legislation enacted after the financing has been established but effective for the period for which financing has been set,

may affect program costs. As a result, the income to the program may not be equal to incurred costs; therefore, trust fund assets should be maintained at a level which is adequate to cover the impact of a moderate degree of variation between actual and projected costs, as well as the value of incurred but unpaid expenses.

In testing the actuarial soundness of the SMI program, it is not appropriate to look beyond the period for which the enrollee premium rates and level of general revenue financing have been established. The primary tests of actuarial soundness, then, are that: (1) assets and income for years for which financing has been established be sufficient to meet the projected benefits and associated administrative expenses incurred for that period and (2) assets be sufficient to cover projected liabilities that will have been incurred by the end of that time but will not have been paid yet. Even if these tests of actuarial soundness are not met, the program can continue to operate if the trust fund remains at a level adequate to permit the payment of claims as presented. However, to protect against the possibility that cost increases under the program will be higher than assumed, assets should be sufficient to include contingency levels to cover the impact of a moderate degree of variation between actual and projected costs.

Contingency levels to accommodate cost increases that may be higher than expected are measured by the excess of assets over liabilities. An appropriate target level for this excess depends on numerous factors. The most important of these factors are: (1) the difference from prior years in the actual performance of the program and the estimates made at the time financing was established and (2) the expected relationship between incurred and cash

expenditures. Ongoing analysis is made of the former as trends in the differences vary over time.

2. INCURRED EXPERIENCE OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

The tests of actuarial soundness of the SMI program noted above rely on the incurred experience of the program. Cash disbursements for benefits and administrative expenses by themselves are misleading, due to the relatively large liabilities outstanding at any time for benefits and processing costs. Outstanding liabilities result from the lag between the time that services are performed and the time that payments for them are made.

The experience of the program is substantially more difficult to determine on an incurred basis than on a cash basis. Payment for some services is reported only on a cash basis, and the incurred experience must be inferred from the cash payment information. For recent time periods, the tabulations of bills are incomplete due to normal processing delays. Finally, since bills are tabulated only for a sample of beneficiaries, the data is subject to biases and random fluctuations inherent in the sampling process.

Table 8 shows the estimated transactions of the trust fund on an incurred basis. For the reasons stated above, the incurred experience must be viewed as an estimate even for historical years. Various checks, such as cash outlay data, assure that the estimates are reasonably close, however.

Table 8.-- ESTIMATED INCOME AND DISBURSEMENTS INCURRED UNDER SUPPLEMENTARY MEDICAL INSURANCE PROGRAM FOR FINANCING PERIODS THROUGH DECEMBER 31, 1990
(In millions)

Financing period	Premiums from enrollees	Government contributions	Interest and other income	Benefit payments	Administrative expenses	Net operations in year
Historical:						
12-month period ending June 30,						
1967	\$ 647	\$ 647	\$ 15	\$ 1,109	\$ 123 1/2	\$ 77
1968	698	698	21	1,443	155	-181
1969	903	903	24	1,765	198	-133
1970	936	936	12	1,929	213	-258
1971	1,253	1,253	18	2,090	259	175
1972	1,340	1,340	29	2,289	259	161
1973	1,427	1,426	45	2,500	302	96
1974	1,704	2,031	76	3,149	353	309
1975	1,887	2,396	105	3,928	438	22
1976	1,951	2,972	109	4,818	485	-271
1977	2,156	4,687	157	5,861	515	634
1978	2,358	5,991	254	6,948	511	1,144
1979	2,601	6,570	365	8,171	649	736
1980	2,823	6,627	421	9,938	645	-712
1981	3,178	8,219	371	12,055	692	-979
1982	3,737	12,488	495	14,054	728	1,938
1983	4,202	13,951	686	17,075	708	1,056
Transition semester 2/	2,120	7,836	374	9,734	483	113
Calendar year						
1984	5,167	17,052	962	20,309	869	2,003
1985	5,613	18,243	1,248	22,806	986	1,342
1986	5,722	17,802	1,141	26,551	1,000	-2,886
1987	6,717	21,377	880	30,733	1,036	-2,795
1988	9,453	28,342	903	34,562	1,307	2,829
1989	12,263	30,826	1,241	38,691	1,538	4,101
Projected:						
Calendar year						
Alternative A:						
1990	11,125	32,455	1,285	44,216	1,460	-811
Alternative B:						
1990	11,125	32,455	1,285	44,216	1,460	-811

1/ Includes administrative expenses incurred prior to the beginning of the program.

2/ The transition semester is the 6-month period July 1, 1983 to December 31, 1983.

3. ACCUMULATED EXCESS OF ASSETS OVER LIABILITIES

The liability outstanding at any time for the cost of services performed for which no payment has been made is referred to as "benefits incurred but unpaid." Estimates of the amount of benefits incurred but unpaid as of the end of each financing period, and of the administrative expenses related to processing these benefits, appear in Table 9. For some years of the program, assets have not been as large as outstanding liabilities. Nonetheless, the fund has remained positive, allowing claims to be paid.

Program financing has been established through December 31, 1990. The financing for CY 1990 for the aged was designed with specific margins to maintain the excess of assets over liabilities as a percent of incurred expenditures for the following year. For the disabled the financing for CY 1990 was designed to reduce the excess of assets over liabilities. In addition, Public Law 101-239 was enacted on December 19, 1989 after the financing had been established for CY 1990. As a net result of these measures, the excess of assets over liabilities is expected to decrease from \$8,479 million at the end of December 1989 to \$7,668 million at the end of December 1990 under both alternative A and alternative B. This excess as a percent of incurred expenditures for the following year is expected to decrease from 18.6 percent as of December 31, 1989 to 14.8 percent as of December 31, 1990.

4. SENSITIVITY TESTING

Some of the assumptions underlying the projections presented in this report are highly uncertain, and variations in these assumptions would have a

Table 9.-- SUMMARY OF ESTIMATED ASSETS AND LIABILITIES OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM AS OF THE END OF THE FINANCING PERIOD, FOR PERIODS THROUGH DECEMBER 31, 1990 (Dollar amounts in millions)

	Balance in trust fund	Government contributions due but unpaid	Total assets	Benefits incurred but unpaid	Administrative costs incurred but unpaid	Total liabilities	Excess of assets over liabilities	Ratio ^{1/}
Historical:								
As of June 30,								
1967	\$ 486	\$ 24	\$ 510	\$ 445	\$ -12	\$ 433	\$ 77	0.05
1968	307	88	395	498	1	499	-104	-0.05
1969	378	7	385	618	4	622	-237	-0.11
1970	57	15	72	568	0	568	-496	-0.21
1971	290	22	312	623	11	634	-322	-0.13
1972	481	-3	478	657	-19	638	-160	-0.06
1973	746	-7	739	766	37	803	-64	-0.02
1974	1,272	-5	1,267	1,041	-19	1,022	245	0.06
1975	1,424	67	1,491	1,204	14	1,218	273	0.05
1976	1,219	106	1,325	1,150	-29	1,321	4	0.00
1977	2,170	91	2,261	1,622	3	1,625	636	0.09
1978	3,786	48	3,834	2,013	40	2,053	1,781	0.20
1979	4,880	2	4,882	2,264	123	2,387	2,495	0.24
1980	4,657	0	4,657	2,686	188	2,874	1,783	0.14
1981	3,801	0	3,801	2,983	13	2,996	805	0.05
1982	5,534	1	5,535	2,801	-9	2,792	2,743	0.15
1983	6,780	2	6,782	3,031	-48	2,983	3,799	0.19
As of December 31,								
1983	7,070	1	7,071	3,227	-69	3,158	3,913	0.19
1984	9,698	2	9,700	3,875	-91	3,784	5,916	0.25
1985	10,924	0	10,924	3,734	-38	3,696	7,228	0.26
1986	8,291	0	8,291	4,046	-98	3,948	4,343	0.14
1987	8,394 ^{2/}	0	8,394 ^{2/}	4,959	17	6,846 ^{2/}	1,548	0.04
1988	8,990	3	8,993	4,552	64	4,616	4,377	0.11
1989 ^{3/}	13,541	0	13,541	4,949	113	5,062	8,479	0.19
Projected:								
Alternative A:								
1990	13,303	0	13,303	5,522	113	5,635	7,668	0.15
Alternative B:								
1990	13,303	0	13,303	5,522	113	5,635	7,668	0.15

^{1/} Ratio of the excess of assets over liabilities to the following year's total incurred expenditures.

^{2/} Section 706 of Title VII of the Social Security Act modified the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January, 1988 occurred on December 31, 1987. Consequently, the SMI premiums withheld from the checks (\$692 million) and the general revenue matching contributions (\$2,178 million) were added to the SMI trust fund on December 31, 1987 and were included in the liabilities.

^{3/} The transactions of the Medicare Catastrophic Coverage Account are included in the assets and liabilities of the trust fund.

substantial impact on projected expenditures. In order to test the future status of the program under varying assumptions, a low cost projection and a high cost projection were prepared by varying these key assumptions. The low and high cost alternative sets of assumptions are intended to reflect growth rates for the various components of program costs which are more favorable and adverse, respectively, than those of the intermediate projections (alternatives A and B) and which are not unreasonable themselves in light of the nature and historical experience of the program. As such, they provide a range of financial outcomes within which the actual experience of the program might reasonably be expected to fall. The values for the alternative assumptions were determined from a study on the average historical variation in the respective increase factors.

Table 10 indicates that, under the low cost assumptions, trust fund assets would exceed liabilities by the end of December 1990 (the period through which financing has been established), reaching a level of 29.0 percent of the following year's incurred expenditures. If these low growth rates were actually to materialize, then subsequent financing rates would be adjusted downward in order to lower the excess of assets over liabilities to an appropriate level to maintain the actuarial soundness of the trust fund. Under the high cost assumptions, trust fund assets would still exceed liabilities by the end of December 1990, reaching a level of 2.9 percent of the following year's incurred expenditures. Therefore, even if these high growth rates were to occur, assets would still be sufficient to cover outstanding liabilities.

Table 10.-- ACTUARIAL STATUS OF THE SMI TRUST FUND UNDER THREE SETS OF ASSUMPTIONS FOR FINANCING PERIODS THROUGH DECEMBER 31, 1990

	Alternative B projection			Low cost projection			High cost projection		
	12-Month period ending June 30, 1989 1990 1991			12-Month period ending June 30, 1989 1990 1991			12-Month period ending June 30, 1989 1990 1991		
Projection factors (in percent): ^{1/}									
Physician fees ^{2/}									
Aged	2.6	1.8	3.7	2.4	1.0	2.6	2.9	2.6	4.8
Disabled	2.6	1.8	3.7	2.4	1.0	2.6	2.9	2.6	4.8
Utilization of physician services ^{3/}									
Aged	5.4	6.7	6.9	3.5	5.1	3.8	7.2	8.4	10.0
Disabled	3.7	6.0	6.0	-0.4	1.5	1.0	7.9	10.6	10.9
Outpatient hospital services per enrollee									
Aged	9.3	16.0	15.2	3.8	7.6	7.8	14.7	24.5	22.5
Disabled	-6.2	10.5	14.5	-10.7	-2.0	0.4	-1.7	23.0	28.6
Actuarial status (in millions):									
	As of December 31, 1988 1989 1990			As of December 31, 1988 1989 1990			As of December 31, 1988 1989 1990		
Assets	\$8,993	\$13,541	\$13,303	\$8,993	\$13,541	\$16,609	\$8,993	\$13,541	\$9,741
Liabilities	4,616	5,062	5,635	4,154	2,970	3,287	5,080	7,210	8,070
Assets less liabilities	\$4,377	\$ 8,479	\$ 7,668	\$4,839	\$10,571	\$13,322	\$3,913	\$6,331	\$1,671
Ratio of assets less liabilities to expenditures (in percent) ^{4/}									
	10.9	18.6	14.8	12.5	25.0	29.0	9.3	12.8	2.9

^{1/} Because of the manner in which alternative economic assumptions affect the projected operations of the SMI program, there is not a substantial difference in the projections based upon the two sets of assumptions. Therefore only one projection, alternative B, is presented here. Appendix A presents an explanation of the effects of alternative A and alternative B on the projections in the report.

^{2/} As recognized for payment under the program.

^{3/} Increase in the number of services received per enrollee and greater relative use of more expensive services.

^{4/} Ratio of assets less liabilities at the end of the year to total incurred expenditures during the following year, expressed as a percent.

CONCLUSION

The financing for the SMI program has been established through December 1990 by the setting of the standard monthly premium rate (paid by or on behalf of each enrollee) of \$28.60 for CY 1990 and of actuarial rates that determine the amount to be contributed from general revenue on behalf of each enrollee. General revenue contributions are expected to account for 72.3 percent of all SMI income during CY 1990.

Under both sets of intermediate assumptions used in this report, disbursements are projected to exceed income during CY 1990 and CY 1991. Income is composed of premiums paid by the enrollees, general revenue contributions, and interest earned by the trust fund. As a result, the assets in the trust fund on a cash basis are projected to decrease from \$13.5 billion at the end of CY 1989 to an estimated \$13.3 billion at the end of CY 1990 and then to decrease to an estimated \$12.3 billion at the end of CY 1991.

The financing for CY 1990 was established to maintain aged assets and to decrease disabled assets while reducing the overall relative level of the excess of assets over liabilities. In addition, Public Law 101-239 was enacted on December 19, 1989 after the financing had been established for CY 1990. As a net result of these measures, the excess of assets over liabilities is expected to decrease from \$8,479 million at the end of December 1989 to \$7,668 million under both alternative A and alternative B, by the end of December 1990, representing 14.8 percent of the projected incurred expenditures. Under more pessimistic assumptions as to cost increases, assets based on financing already established will still be sufficient to cover outstanding liabilities. Hence, the financing established through December 1990 is sufficient to cover projected

benefit and administrative costs incurred through that time period, and to maintain a level of trust fund assets adequate to cover the impact of a moderate degree of variation between actual and projected costs.

Although the SMI program is financially sound, the Board notes with concern the rapid growth in the cost of the program. Growth rates have been so rapid that outlays of the program have nearly doubled in the past five years. For the same time period, the program grew 40 percent faster than the economy as a whole. This growth rate shows no sign of significantly abating despite recent efforts to control the cost of the program.